

Milano



Comune  
di Milano

PIONEERED BY THE  
ROCKEFELLER FOUNDATION

100

RESILIENT

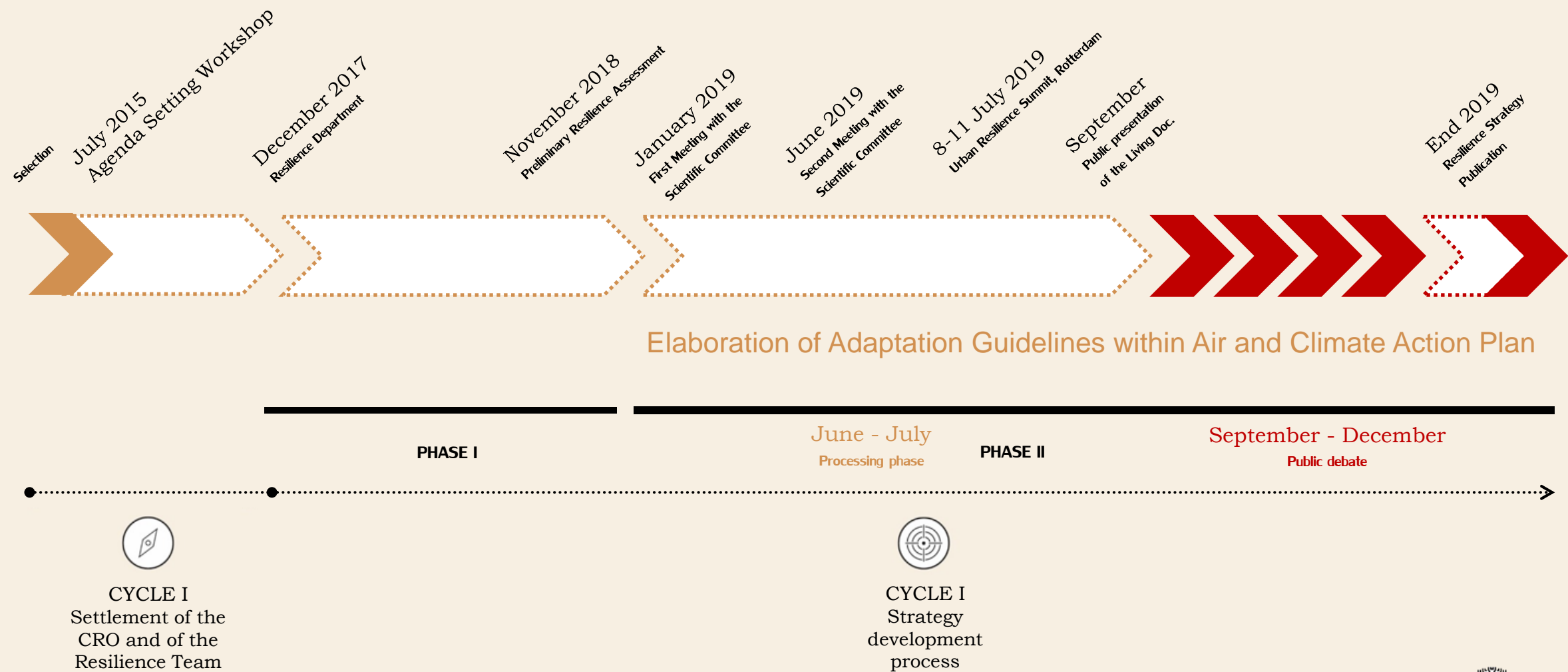
CITIES

**LIFE FRANCA International Conference– 21/10/19, TRENTO**

## **MILAN RESILIENCE STRATEGY**

City Resilience Department  
Milan Municipality  
Francesca Putignano

RESILIENCE STRATEGY | LIVING DOCUMENT





# Shocks



*Heavy rainfall - flood*



*Infrastructural failure*



*Social deprivation and poverty*

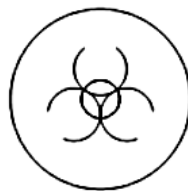


*Phishing attacks*

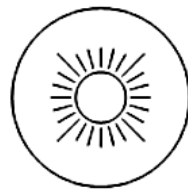


*Accidents and hazardous materials*

# Stresses



*Air and water pollution*



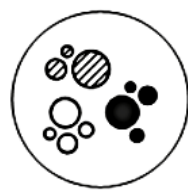
*Heatwaves*



*Lack of comfortable urban spaces*



*Temporary uses and site operations*



*Inequality – social segregation*



*Lack of affordable housing*



*Ageing population*



*Security and terrorism menace*



*Migration waves*



*Outrages and civil disorders*

## 6 DISCOVERY AREAS

1 Milan and Water



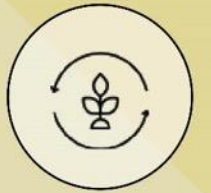
2 Living Milan



3 Cool Milan



4 Circular Milan



5 Safer Milan



6 Next-US Milan

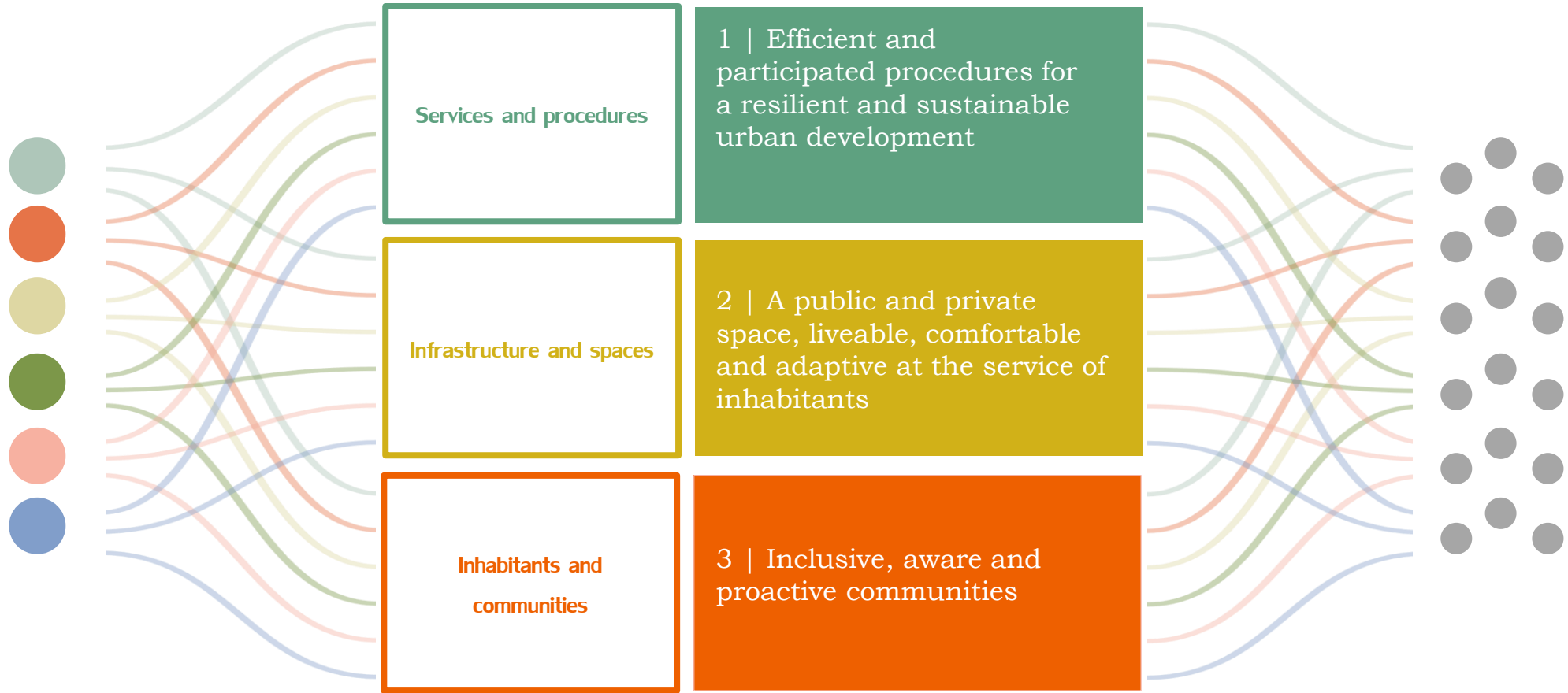


# STRATEGY DEVELOPMENT PROCESS

6 Discovery Areas

3 Pillars

Actions





PILLAR 1 | EFFICIENT AND  
PARTICIPATED PROCEDURES FOR A  
RESILIENT AND SUSTAINABLE  
URBAN DEVELOPMENT



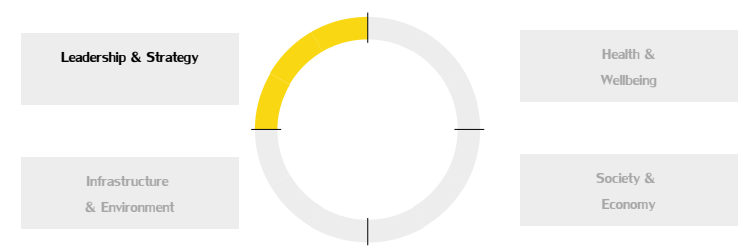


Establishment of a  
Resilience Department

Shocks & stress

- all

City Resilience Index



Stakeholders

General Department, Urban Planning Department, City Resilience Department

Status  
**Established and working**

SDGs





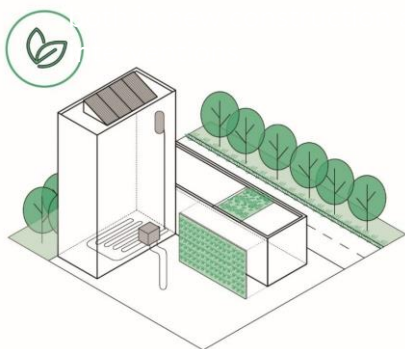
## City Government Plan

### Shocks & stress

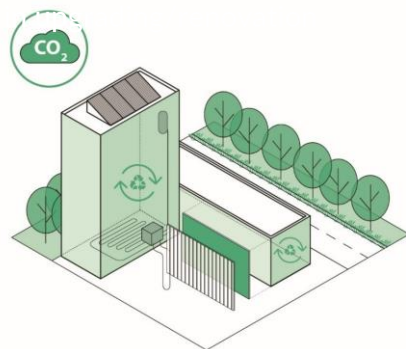
- .Poor air and water quality
- .Heat waves
- .Flooding

### Designing a new ecology. Sustainability standards.

High performance rules for new construction will allow a reduction in energy consumption, restore and maximize permeable areas in the city, and to reduce carbon footprint



RENATURALISATION



CARBON FOOTPRINT  
REDUCTION

### Stakeholders

City Resilience Department, Urban Planning  
Department, AMAT (agency for mobility environment  
and the territory)

Status

**Approval procedures on-going**



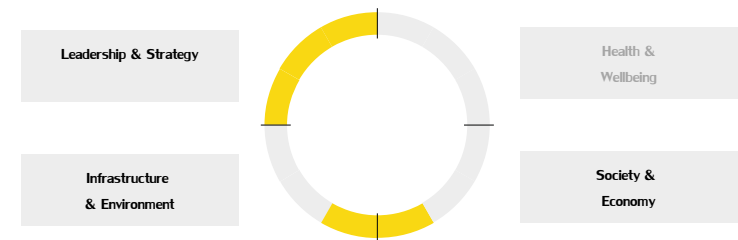


# Sustainable Roof Project

## Shocks & stress

- Poor air and water quality
- Heat waves

## City Resilience Index

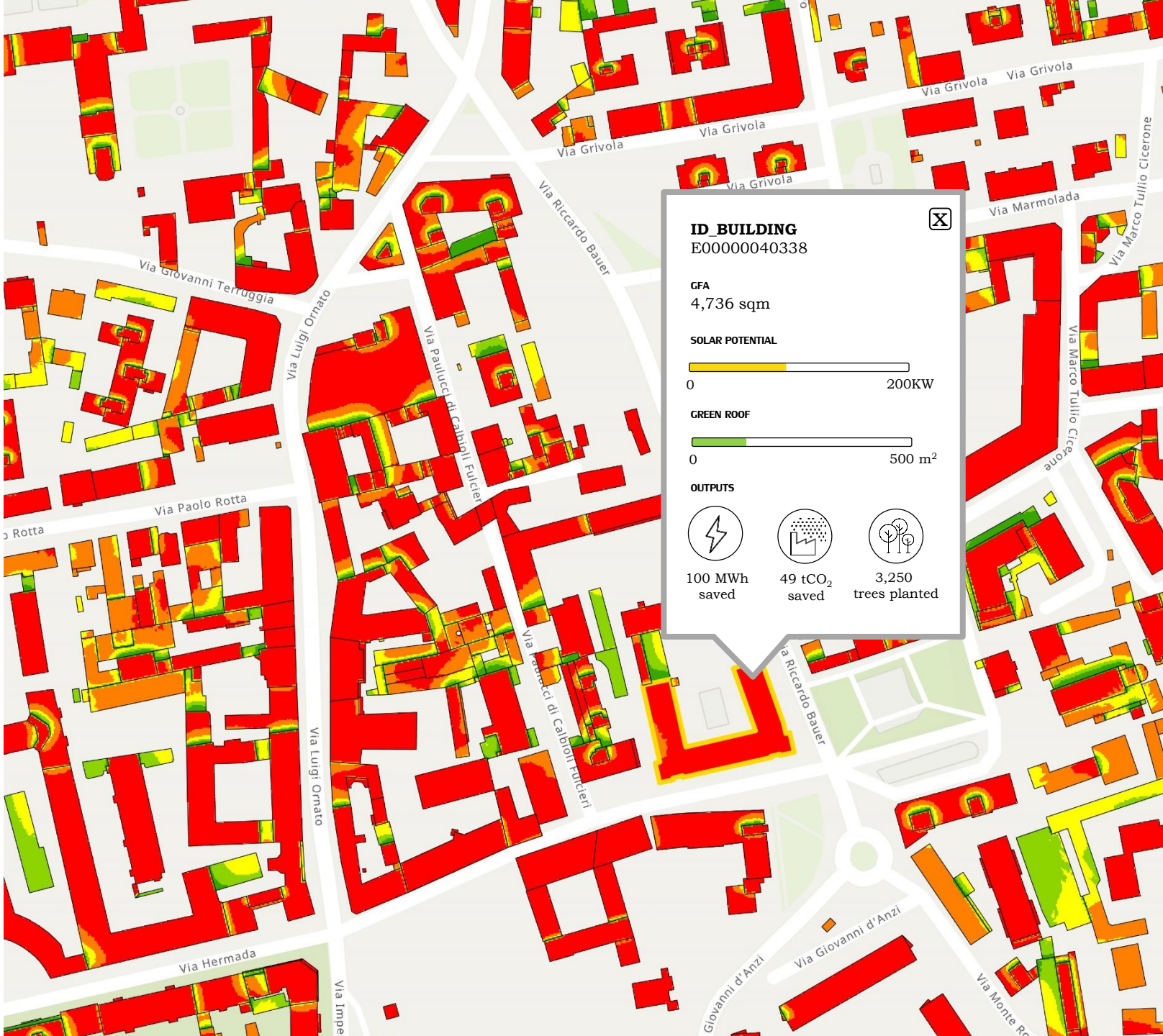


## Stakeholders

City Resilience Department,  
IT Systems Department and Digital Agenda, ARUP, Agenzia Mobilità Ambiente Territorio (AMAT)

## Status On-going

## SDGs





## H2020 CLEVER Cities Project



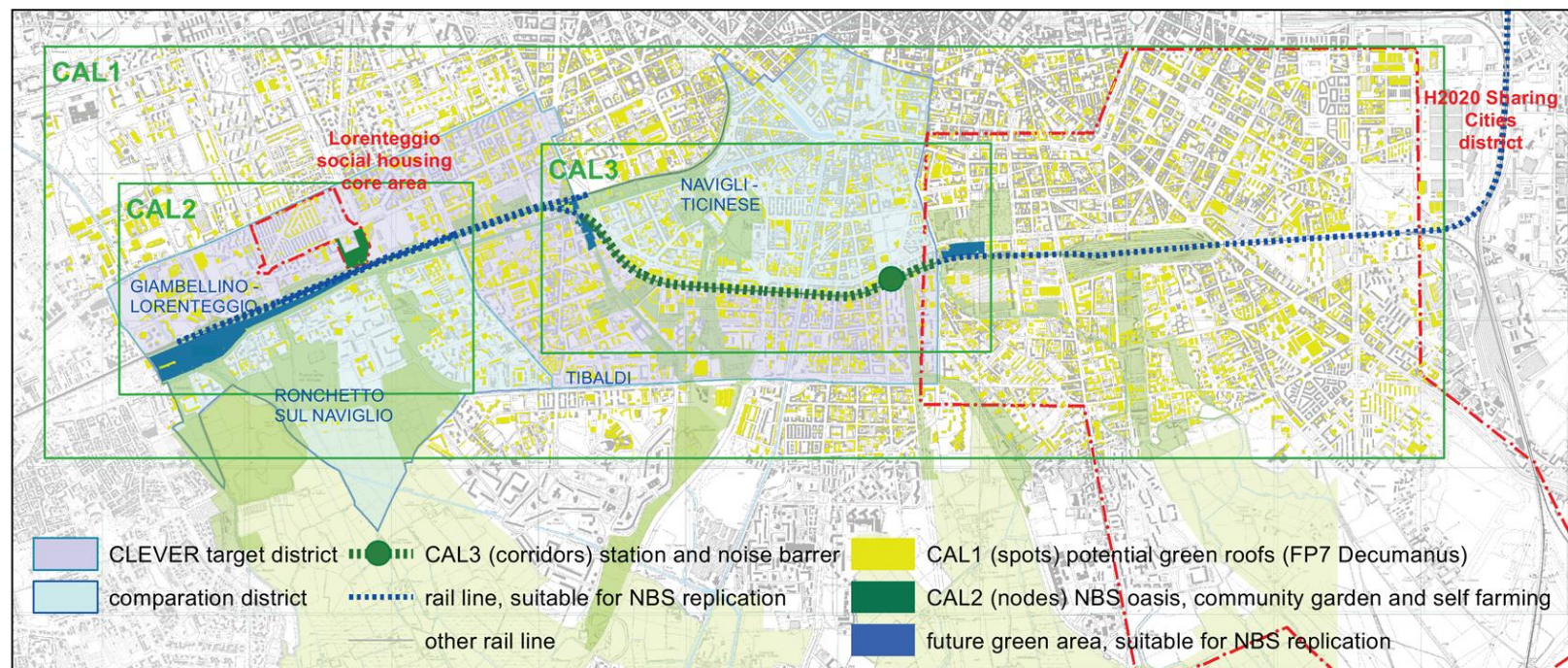
### Co-designing Locally tailored Ecological solutions for Value-added urban Regeneration

Design and implementation of the interventions through a co-creation process that provides the setting up of the Urban Innovation Partnership (UIP) at urban level and of 3 more specific CLEVER Action Lab (CAL).

Milan CAL are focused on

1. promotional campaign, incentives and pilot projects on multifunctional green roofs and walls;
2. innovative solutions for community gardens and farming;
3. innovative plantations, water management on noise barriers: integration of NBS in a new railway station

Status  
**On-going: 2018/2023**



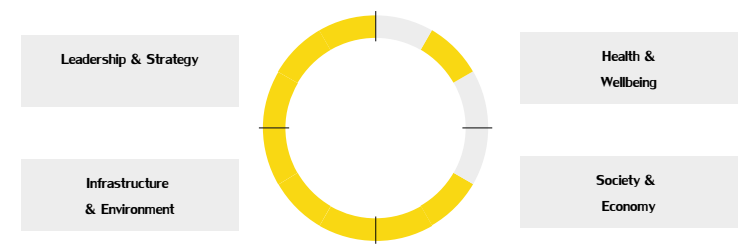


SPARE – Resilient Space

Shocks & stress

- Collapse of infrastructure
- Hazardous materials accidents
- Poor air and water quality
- Heat waves
- Construction site management and temporary uses
- flooding

City Resilience Index



Stakeholders

Municipality of Milan, Politecnico di Milano, Assolombarda General Confederation of Italian Industry (Milan, Monza-Brianza, and Lodi)

Status  
**On going (5 years term)**

SDGs





**PILLAR 2 |**  
**A PUBLIC AND PRIVATE SPACE,**  
**LIVEABLE, COMFORTABLE AND**  
**ADAPTIVE AT THE SERVICE OF**  
**INHABITANTS**





## PAC – Climate Action Plan

### Shocks & stress

- .Flooding
- .Poor air and water quality
- .Heat waves
- .Inequality and social exclusion
- .Decay of urban areas and spaces

### Priorities:

- . SLOW MILAN
- . POSITIVE ENERGY MILAN
- . COOL MILAN
- . INCLUSIVE MILAN
- . AWARE CITIZENS

### Stakeholders

City Resilience Department, Air and Climate Unit, Agenzia Mobilità Ambiente e Territorio (AMAT)

### Status

On-going

to be released in December 2019, approval process in 2020

Vision and targets to 2030 and 2050

### SDGs





# ForestaMI – Urban forestation program

## ForestaMI

A strategic vision at the whole Milan Metropolitan Area towards a great Metropolitan Park, with the aim of collecting, implementing, and enhancing the main green, permeable and tree-lined systems

### Shocks & stress

- .Flooding
- .Poor air and water quality
- .Heat waves
- .Decay of urban areas and spaces
- .Construction site management and temporary uses

### Stakeholders

Municipality of Milan  
Metropolitan City of Milan  
Milan North Park  
Milan Agricultural South Park  
RESEARCH: Politecnico di Milano  
RESEARCH SPONSOR: Falck Foundation

### Status

On-going, vision and target by 2030: 3 millions trees

SDGs





# ForestaMI - Urban forestation progr

## FOCUS: school courtyards



### Milano School OASIS

Greening opportunity

Adaptation to the changing climate

Sustainability

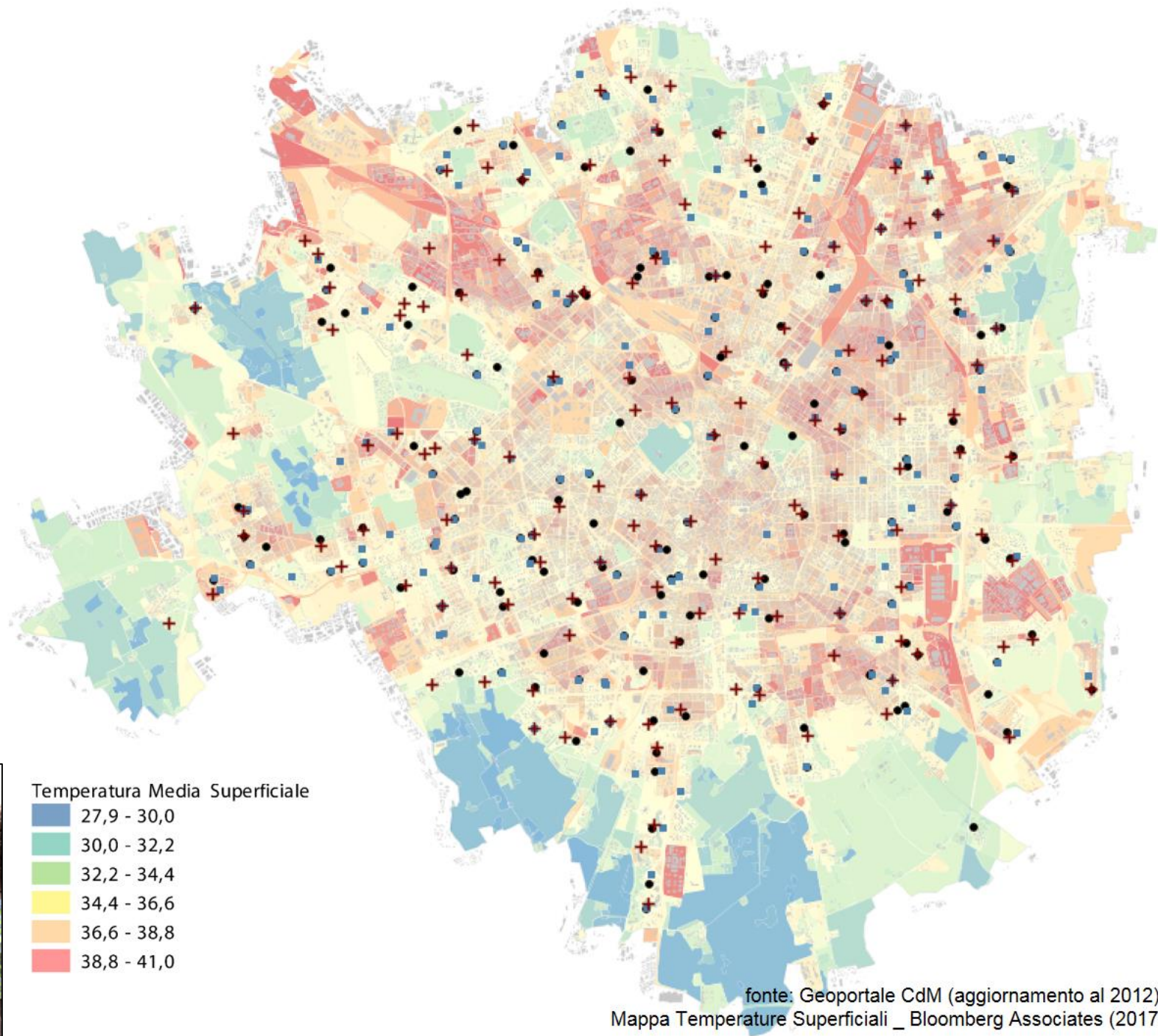
Cultural integration

Outdoor education

#### Status

On-going: call to be launch by the end of 2019

Financed by private sponsorship



fonte: Geoportale CdM (aggiornamento al 2012);  
Mappa Temperature Superficiali \_ Bloomberg Associates (2017)



# LIFE VEG-GAP Project LIFE18 - PRE IT 3



## Shocks & stress

- Poor air and water quality
- Heat waves

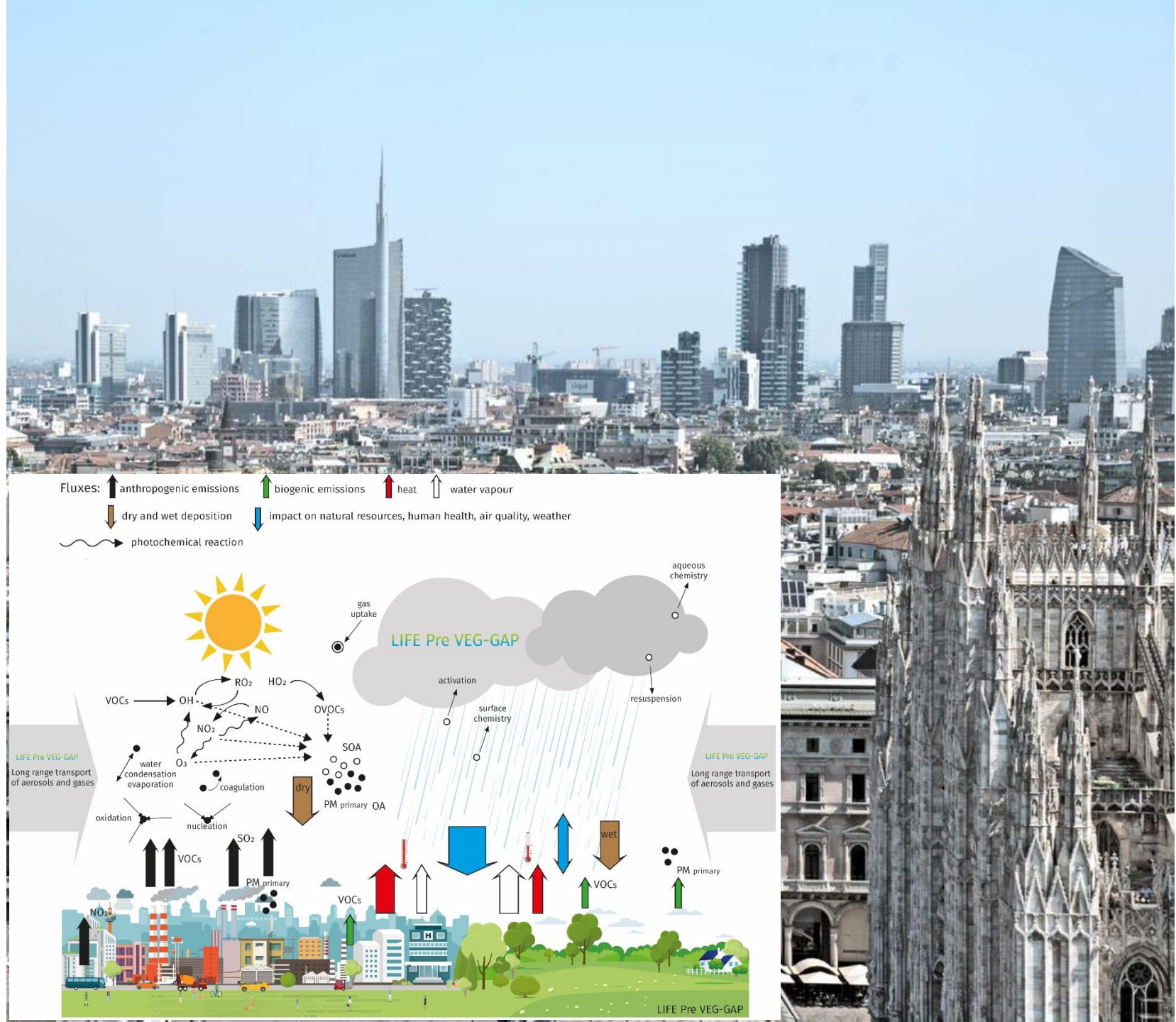
The first EU project studying the relationship between urban green, temperature and air quality in an integrated holistic way.

## Stakeholders

Lead partner: ENEA  
Milan Municipality  
Madrid Municipality  
Bologna Metropolitan city  
ARIANET, CREA, MEEO and the University Polytechnic of Madrid

Status

**On-going:** 2019/2021





**PILLAR 3 |  
INCLUSIVE, AWARE AND  
PROACTIVE COMMUNITIES**



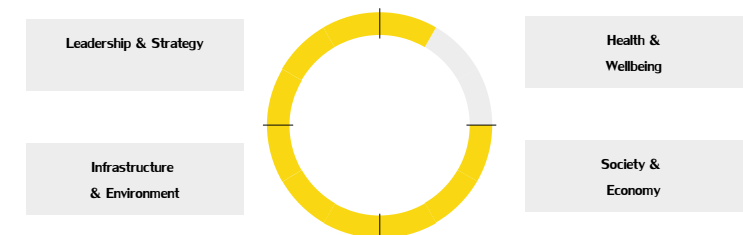


## Officina Urbana – visions for neighbourhoods’ transformation

## Shocks & stress

- Flooding
- Poor air and water quality
- Heat wave
- Decay of urban areas and spaces
- Inequality and social exclusion
- Poverty and deprivation

## City Resilience Index



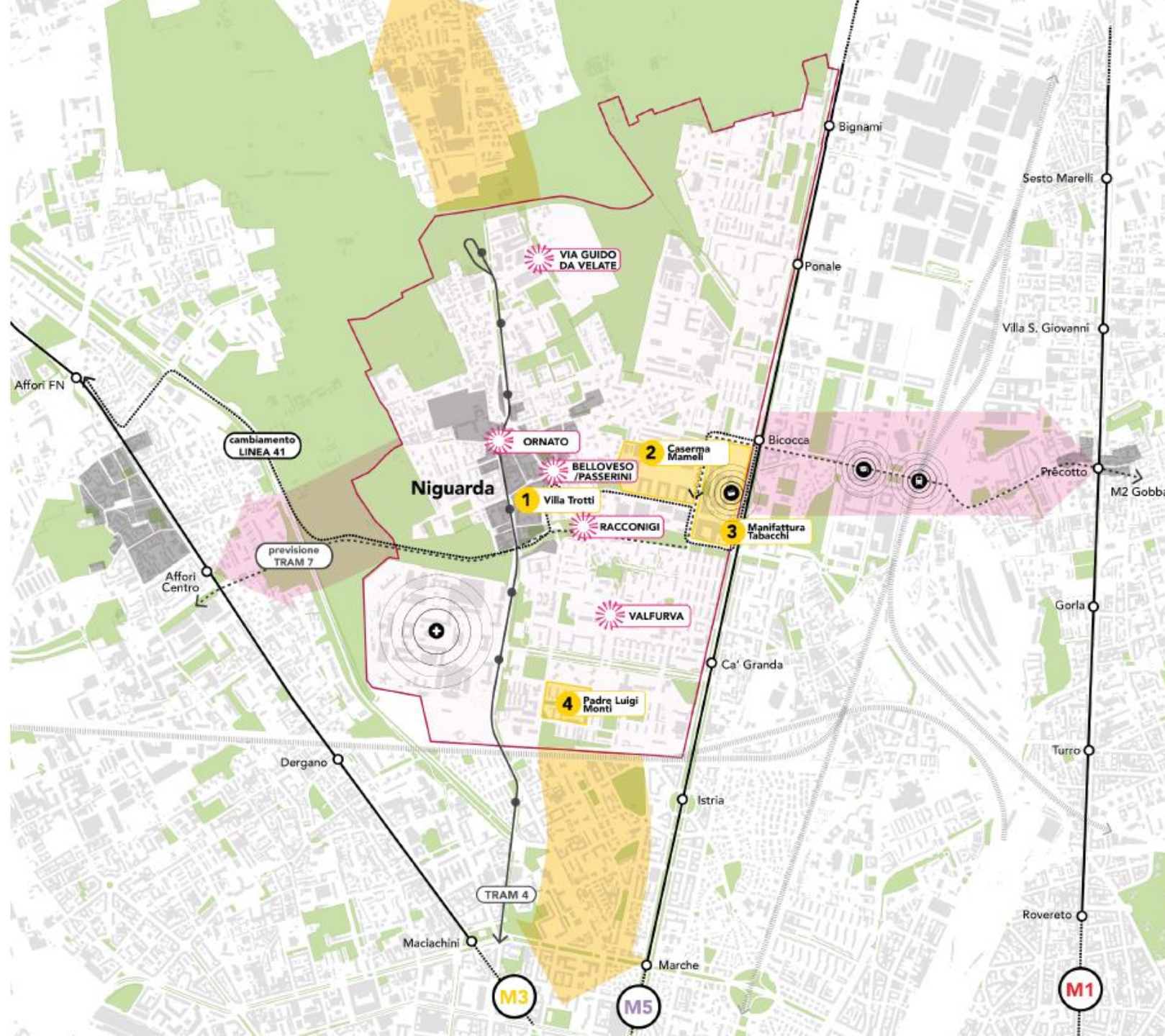
## Stakeholders

City Resilience Department, General Department, Urban Planning Department, Mobility  
Enviroment and Energy Department, Neighbourhoods Department, AMAT

## Status

### On-going

## SDGs





Piazze Aperte



Via Venini

Piazza Dergano



Piazza Angilberto



Piazza Gasparri



P.Ta Genova



## Piano Anticaldo

Against Loneliness

### Shocks & stress

- Extreme heat and heatwaves
- Ageing population

### 4 Types of Service:

- Assistance from remote
- Social Services
- Social Security
- Socio-recreational centers



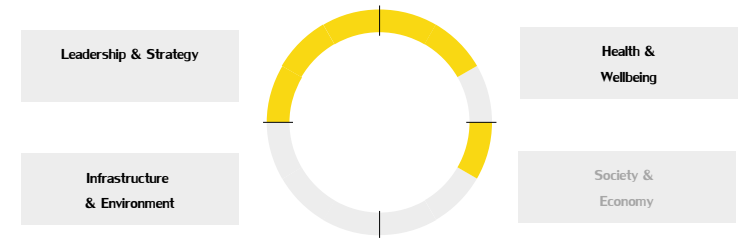


# Educational program with International Rescue Committee

## Shocks & stress

- Poverty and deprivation
- Inequality and social exclusion

## City Resilience Index



## Stakeholders

City Resilience Department,  
Neighbourhoods Department, Education Department, International Rescue Committee (IRC)

## Status

On-going (phase I is completed, research funding for phase II has started)

## SDGs





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